



OFFICE OF
CONTROLLER

LAURA N. CHICK
CONTROLLER

200 N. MAIN STREET
LOS ANGELES 90012

January 31, 2002

Honorable James K. Hahn, Mayor
Honorable Members of the City Council

Dear Mayor Hahn and Members of the Council:

The attached reports I release for your consideration are reviews of (1) the Los Angeles Fire Department's (LAFD) own analysis of its emergency response time data, and (2) the LAFD's procedures for ensuring that non-City owned buildings are in compliance with the City's fire code. In each case, aspects of the Department's operations are functioning well, but important improvements should be made.

Turning briefly to each report, our review of the LAFD's own analysis of its response time data focused on whether the Department uses proper performance measures in evaluating its response time, and whether response time data can be validated. We found that the Department uses the right criteria to judge its performance in this area, by measuring itself against national standards for first responder and first paramedic unit to arrive at emergency medical calls. In addition, the LAFD's criteria for evaluating its response time on fire-related calls meets and in some cases exceeds the evaluation standards of other fire agencies.

Critical improvements are needed, however, in the area of data analysis. The very data being analyzed cannot be completely validated or verified by the Department or anyone else, because the LAFD uses an outdated, nonverifiable system to track response times. This lack of ability to verify information means that the Department, despite its genuine effort, cannot with total accuracy track and measure performance in the critical area of response time, and cannot use the data accurately as a basis for resource allocation and deployment. We therefore urge the Department to immediately determine the feasibility, and cost and quality benefits, of acquiring new technology to solve this problem.

Regarding our review of LAFD fire code enforcement procedures in non-City owned buildings, the majority of fire code violations are resolved at the hearing stage. Cases not resolved at the



hearing stage are referred to the Department's Legal Liaison Unit for handling. This unit achieves a 92.4% success rate in getting property owners to bring cited properties into compliance with the fire code. This is commendable indeed. While the LAFD is very successful in this area, however, its process is often long, cumbersome and expensive to the City. We recommend improved technology in order to increase efficiency and operational effectiveness.

I hope our recommendations will be expeditiously implemented, and I appreciate the assistance auditors received in conducting these reviews. As always, I am available to discuss these findings with you. Thank you for your attention to these important matters.

Sincerely,

A handwritten signature in black ink that reads "Laura N. Chick". The signature is written in a cursive, flowing style.

LAURA N. CHICK
City Controller

Attachments



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CONTROLLER

LAURA CHICK
CONTROLLER

200 N. MAIN STREET
ROOM 1200
LOS ANGELES 90012
(213) 485-5066

January 31, 2002

William R. Bamattre, Fire Chief
Los Angeles Fire Department
200 North Main Street, Room 1020
Los Angeles, CA 90012

RESPONSE TIMES VALIDATION

Dear Chief Bamattre:

Our office conducted an analysis to determine if the department is using the correct benchmarks when measuring performance and whether response times reported by the department can be validated. The scope of this project covered the period from July 1998 through December 2000 and the fieldwork for the project was conducted during July and August 2001.

Our analysis concluded that your Department is using the appropriate criteria to benchmark your response to medical emergency and fire related calls for assistance. It appears that the criteria used by the LAFD to benchmark response data to fire related calls meets and in fact may exceed that of other fire agencies. However, we found that certain components of the response data captured may be subject to errors because they are manually, rather than computer-generated.

According to LAFD personnel, national standards do not exist for individual components of response times¹. There are, however, national standards for first responder and first paramedic unit to medical emergency calls for assistance, which are 4 and 8 minutes, respectively.

¹ Response time components for the LAFD include 1) 911 answer time by police service representative; 2) transfer of call to LAFD; 3) answer time by LAFD; 4) initiation of dispatch by LAFD; 5) actual dispatch of call by LAFD; 6) turnout time of LAFD unit; and 7) response time by LAFD unit.



It was reported to our auditors that the National Fire Protection Association (NFPA) is in the process of revising response time standards and is proposing to include three of the areas that the LAFD is currently using – dispatch time, turnout time, and response time. The NFPA response time standards that are anticipated to be proposed are:

- 1 (one) minute for dispatch time;
- 1 (one) minute for turnout time; and,
- 4 (four) minutes for response time.

According to the LAFD, other agencies do not begin tracking responses until the call is received at the responding station. The LAFD believes it is more accurate to track calls when they are received by the 911 operators, because it provides a better measurement for evaluating efficiency to calls for service. We agree with the policy of measuring response times based on the receipt of the call.

We note the following observation that we believe requires your attention.

OBSERVATION:

Current response time information for fire and emergency medical services cannot be accurately validated. Officials at LAFD stated that response time information cannot be completely validated because some steps in the current process rely on mechanical intervention that is subject to human error. The LAFD is able to determine the frequency that buttons are not pushed at required points during the mechanical phases in the process, which provides an error rate. However, what is not always known is if buttons are accurately pushed at required points during the mechanical phases in the process. As a result, department officials confirm that they may not be able to accurately benchmark against similar fire agencies or even against themselves.

COMMENTS

Response times for the LAFD are obtained by tracking call processing and resource response at seven points in time after a request for service is received² (Attachment A). These seven points in time are computer-generated during the first four stages and manually generated by field resources (staff must push buttons) during the last three stages. Response time data that is generated manually by field resources is subject to human error and will result in inaccuracies when the buttons are not pushed, are pushed at the wrong times, or if the button fails to register during the process.

² The LAFD measurement includes the entire response process, which consists of dispatch (begins at the time the call is received by the 911 operator), turnout (preparing to leave the station), and response times (driving time to the scene) to measure its performance.

According to the LAFD, response time information is obtained by averaging data currently available. Since department management cannot validate some of this data, response time information that is generated may not be completely accurate.

We understand that the LAFD management is very interested in the ability to validate response time information in order to track and measure performance in this area. Additionally, accurate information is critical because it forms the basis for resource acquisition and deployment. As an example, the LAFD believes it meets its goal of responding to 90% of service calls within 5 minutes only 40% of the time. LAFD management personnel stated that additional resources are needed to keep up with the increasing demand for service.

Department officials stated that there are systems available to eliminate the manual procedures to record response times. Global Positioning Systems (GPS) track response times and vehicle locations without the need to manually push buttons. Department officials report that the cost to implement GPS throughout the department is estimated to be approximately \$15 million. GPS would eliminate the human error element, as well as, track the location and status of every emergency vehicle. This system facilitates the dispatch of the closest units to emergency incidents, and generates a computer record with accurate response times.

RECOMMENDATION (S):

Based on our review, we recommend the following actions:

- 1 That the department establish specific standardized procedures and train personnel on when to "Push the Button" when responding to calls and to monitor the process;
2. That the department conduct research to determine if a GPS would be feasible and cost beneficial to the City of Los Angeles as it relates to the provision of Fire Prevention and Emergency Medical Services; and,
3. If the department determines that a GPS is feasible and cost beneficial, develop an implementation plan for the system, to include resource allocation (staffing, budget, etc) for presentation and consideration by Mayor and Council.

The Los Angeles Fire Department (LAFD) reports that it provides for a high level of life and property safety through the extension of fire prevention, fire control, and emergency medical services. It is critical that department management has the ability to verify the dispatch process works effectively and efficiently to reduce the risk of life and property loss.

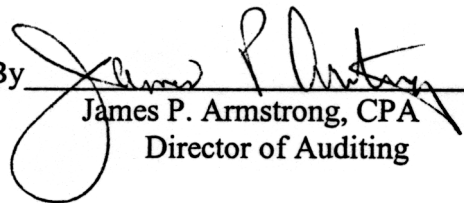
Mr. William R. Bamattre, Fire Chief
Los Angeles Fire Department
January 31, 2002
Page 4 of 4

A draft of this letter was provided to the Los Angeles Fire Department on December 14, 2001. Department officials declined an exit conference, however, they did provide additional information to our auditors pertaining to the observation in this review. The information was considered and this letter review reflects the relevant information provided by the Department.

We appreciate the cooperation provided by your staff during this review. Please advise us within 30 days of the action plan you will take to implement the recommendations. If you have any questions or comments regarding this review, please call Sharon Loudd, Senior Management Analyst II, at (213) 847-4349.

Very truly yours,

LAURA N. CHICK, CONTROLLER

By 
James P. Armstrong, CPA
Director of Auditing

JPS:sl

cc: Honorable James K. Hahn, Mayor
Honorable Members of the City Council
Honorable Rockard J. Delgadillo, City Attorney
Commissioner Jay Grodin, President, Los Angeles Fire Department
Commissioner Corina Alarcon, Vice-President, Los Angeles Fire Department
Commissioner Thomas Curry, Los Angeles Fire Department
Commissioner Louise Frankel, Los Angeles Fire Department
Commissioner Ronald Coleman, Los Angeles Fire Department
Timothy McOsker, Chief of Staff, Office of the Mayor
Roberta Yang, Deputy Mayor
William T. Fujioka, City Administrative Officer
Ronald Deaton, Chief Legislative Analyst
Antoinette Christovale, Director of Finance
J. Michael Carey, City Clerk
Independent City Auditors